ATTENTION: GENERAL MANAGER I Service Personnel PARTS MANAGER I Should Read and Initial in the boxes provided, right. SERVICE MANAGER I © 2023 Subaru of America, Inc. All rights reserved.

2023-24MY Ascent

SERVICE BULLETIN

2023-24MY Outback & Legacy

2024MY Crosstrek/Impreza



REVISED:

04/12/24

SUBJECT: FOTA (Firmware Over-The-Air) Reprogramming for DENSO Gen 4.5 Audio Navigation Infotainment Systems via DCM

INTRODUCTION:

APPLICABILITY:

This bulletin provides instruction for use of a new reprogramming procedure to optimize the Denso Gen 4.5 Audio and Navigation system utilized in the models listed above. Firmware-overthe-air (FOTA) is a process where remote devices can receive updates to their operating firmware. This process has become second nature with smartphones, tablets and many other connected devices. FOTA for automotive infotainment systems was designed with an emphasis on customer convenience. FOTA updates provide regular enhancements along with software patches as needed to enhance the customer experience. The convenience factor comes not only with the supply of regular updates and the enhancements they provide, but through customer control of when these updates are downloaded and installed. The only requirement is a valid subscription to SUBARU STARLINK Safety Plus, since the download of the software is performed via DCM. FOTA operation is conducted in two steps: download (from the server to the vehicle via DCM) and installation (internal to CP1.5 system in the vehicle). This bulletin will focus on FOTA for Denso Gen 4.5 audio systems (MID) and audio-navigation systems (HIGH) which utilize the 11.6-inch touch-screen display. Models with 7-inch dual screen display (Base) are not FOTA update capable.

This bulletin outlines the procedure for performing FOTA updates successfully. These procedures involve:

- Assisting customers with FOTA -related concerns if they have been unsuccessful in performing the FOTA by themselves. (Possible vehicle or system concern.) *
- Performing the FOTA update for customers who are not comfortable or need assistance with performing it themselves but have requested the Retailer to install it*
- Updating the firmware using a USB flash drive by following the steps outlined in TSB 15-305-22R "Reprogramming File Availability for Optimization of Gen 4.5 Denso CP1.5 Infotainment Systems" when FOTA cannot be performed due to the setup or eligibility constraints*.

CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

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ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

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* **NOTE:** If a customer is simply requesting help with how to perform FOTA, provide a copy of the appropriate customer instructions for FOTA available on Subarunet: Service Operations & Technical > Forms/Downloads page.

See Appendix A later in this bulletin for more information.

It is **VERY IMPORTANT** to read and understand this information completely **before** proceeding.

NOTES:

- **REMINDER:** FOTA is available for MID and HIGH (Navi) systems with 11.6-inch display only.
- The currently available FOTA firmware version is not the same version available to Retailers for USB updating use. However, a system updated using FOTA can be further updated by using the USB update procedure if additional updates are needed. For additional details clarifying the scope of FOTA updates, review the applicable Owner's Manual Supplement's additional information for the Center Information Display. The information is downloadable from: https://www.subaru.com/ owners/index.html. See **Appendix C** below for more information.
- FOTA updates are for the system firmware ONLY. Map updates are a separate function which the customer may update on their own by using either USB download or Map Over the Air Update (MOTA). Go to: <u>subaru-maps.com</u> for more information.

Reference photos of each system faceplate are supplied below:



Mid/ High

SERVICE PROCEDURE / INFORMATION:

REMINDER: Customer satisfaction and retention starts with performing quality repairs.

The FOTA update process involves a remote downloading and installion the update firmware therefore, time duration depends on signal strength and transfer rate performance. During installation, the infotainment system's functionality will be restricted.

Continued...

SET-UP INSTRUCTIONS AND CAUTIONS:

- Move the vehicle to an outside location where the engine can be safely started and kept idling during the update process.
- Never idle the vehicle in a closed space such as a garage, even if the garage door is kept open.
- Once the vehicle is in a safe location, be sure the vehicle is in Park (CVT) or Neutral (MT) and the parking brake is fully engaged.
- Open one or more windows to ensure fresh air is available.
- Stay with the vehicle until the update is completed.
- We suggest adjusting the climate controls to your desired settings in case they become unavailable during the update process.
- Unplug any devices, chargers, cables or other USB drives from the vehicle's USB and power ports.

VERY IMPORTANT: Before proceeding with the updating procedure, the currently installed version ID MUST be confirmed (Firmware Version Check) by following the steps below:

1) After starting the engine and system boot-up completes, from the HOME screen, touch the Settings button.



2) Press the **General** button. Use the down arrow to scroll to **System Information** then press to display the System Information / Version information.



The examples below identify the head unit model and the last 6 digits 9xxx-xxx) signify the software version number. Examples:

- F71WHMxxx-xxx or F61WHMxxx-xxx (High model software)
- F71WMMxxx-xxx or F61WMMxxx-xxx (Mid model software)

MY	Carline	Trim/Grade	Installed Software Versions	Available Software Version
			<mark>033-270</mark>	<mark>043-270</mark>
			<mark>033-570</mark>	<mark>043-570</mark>
		MID	<mark>033-681</mark>	<mark>043-670</mark>
			<mark>043-781</mark>	not eligible for FOTA
	Outback/Legacy		<mark>053-880</mark>	not eligible for FOTA
			<mark>033-270</mark>	<mark>043-270</mark>
			<mark>033-570</mark>	<mark>043-570</mark>
		HIGH	<mark>033-681</mark>	<mark>043-670</mark>
22-24MV			<mark>043-781</mark>	not eligible for FOTA
2J-24WH			<mark>053-880</mark>	not eligible for FOTA
	Ascent	MID	<mark>033-570</mark>	<mark>043-570</mark>
			<mark>033-681</mark>	<mark>043-670</mark>
			<mark>043-781</mark>	not eligible for FOTA
			<mark>053-880</mark>	not eligible for FOTA
		HIGH	<mark>033-570</mark>	<mark>043-570</mark>
			<mark>033-681</mark>	<mark>043-670</mark>
			<mark>043-781</mark>	not eligible for FOTA
			<mark>053-880</mark>	not eligible for FOTA
		MID	<mark>033-681</mark>	<mark>043-670</mark>
24MY	<mark>Impreza/Crosstrek</mark>	עווא	<mark>053-880</mark>	not eligible for FOTA
		HIGH	<mark>033-681</mark>	<mark>043-670</mark>
			<mark>053-880</mark>	not eligible for FOTA

If the software version number matches "Installed Software Versions" review the information outlined below. If the software version is "Available Software Version" as the unit already has the latest software version installed. Proceed to the WARRANTY / CLAIM INFORMATION section of the TSB and process a claim for Version Check Only.

FOTA REPROGRAMMING OVERVIEW:

• SUBSCRIPTION STATUS - Confirm SUBARU STARLINK Safety Plus subscription

NOTE: FOTA update is possible only with valid SUBARU STARLINK Safety Plus subscription and active DCM. If the status of subscription is unclear, contact STARLINK Customer Care at (855) 753-2495 and find details of STARLINK agreement.

• **SOFTWARE DOWNLOAD** - When software update becomes available, the software is automatically downloaded following IGN-ON operation without customer's operation.

CAUTION: The process could be obstructed due to incorrect clock setting or poor DCM reception. If the clock has wrong time, see Appendix B for how to set the correct time on the clock. If the DCM has lost reception, move the vehicle to a better (4G phone signal) reception area.

Downloading automatically starts and finishes. While the DCM is downloading the new software, all functions of Cockpit Control Unit remain available. The status of the downloading process can be checked using *Settings/General/Software update feature* as shown below.



Normally downloading takes 10-20 minutes depending on reception condition. Even if \times is pressed in the 3rd screen to return, downloading process continues.

In case of intermittent loss of reception by DCM (vehicle moving out of signal range), or Ignition Switch being turned OFF, downloading is paused but the operation resumes as soon as the reception is re-established or system is turned back on.

• **INSTALLATION** - The installation consists of two stages: installation and activation.

Notification screen is automatically displayed, after the background downloading has been successfully completed. This screen is displayed only while the vehicle is not in motion. Select "Yes" '=> Start installation. Once "Yes" is pressed, installation continues even if the 🗙 button is pressed.



Customers can skip installation by selecting <Remind Me Later> up to two times. However, after skipping two times the installation starts automatically as soon as the Ignition Switch is turned ON without any notification. In that case the installation notification (3.a.i) is not displayed anymore. See below for more information.



NOTES:

- If ignition Switch is turned OFF while 3.a.i screen is being displayed, the installation process is terminated. In that case the screen 3.a.ii pops up automatically the next time the Ignition Switch is turned on.
- If ignition Switch is turned OFF during 3.a.ii screen is being displayed, the installation process is terminated. In that case installation process automatically resumes without showing 3.a.ii next time the Ignition Switch is turned on.

• Activation: Wait until the installation is completed (Time required for installation: 15 minutes or less). After the first installation process is coming to an end and the pop-up screen shown below comes up, then press "OK."



Switch the vehicle OFF, exit the vehicle, lock all doors including the rear gate (if equipped) and **move the key fob away from the vehicle at least 10 feet (3m) to enable affected systems to go to sleep. WAIT AT LEAST 5 MINUTES** prior to switching the vehicle ON to assure proper software activation.

Pop-up screen shows up soon after the system completes to boot up. It confirms the software has been installed.



NOTE: See Appendix D for troubleshooting tips if any errors are encountered.

WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period or covered by an active Subaru Added Security Gold plan, this repair may be submitted using the following claim information:

Labor Description	Labor Operation #	Labor Time	Fail Code
DENSO CP1 CHECK ONLY	A031-178	0.2	ZTZ -48

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.

Appendix A

Links to Customer self-install instructions for FOTA Customer Instructions will be added to the Subarunet Service Operations & Technical > Forms/Downloads page when they become available. Once the links are available and to enhance customer satisfaction, consider providing customers with a copy of the appropriate instructions for their specific system along with access to the retailer's secure customer Wi-Fi network. Doing so will enable customers to try performing the FOTA update on their own while at the retailer.



REMINDER: Retailers performing these updates are to follow the Service Procedures outlined in this bulletin ONLY. Always follow the applicable service procedures as outlined in this and other Service Bulletins. The additional steps and requirements supplied in Service Bulletins support a Subaru Technician's proper diagnosis and repair of any customer concern.

Appendix B

How to set the correct time on the clock

Software Update availability notification only works, if the clock has been set accurately. Check if the time shown on the status bar is correct or not.



If the time is not correct, set the clock using procedure below.

<Models with navigation system>

- a. Confirm GPS signal is received. Vehicle position on the map should match its location. If necessary, drive the vehicle to assure good reception.
- b. Check is Clock set to "Auto": Setting" \rightarrow "Clock" \rightarrow "Time Setting".
- c. Once the Navi receives the GPS signal the clock is adjusted automatically.
- d. If the GPS signal is not available, set the clock to "Manual Setting".



<Models without navigation system>

a. Select "Setting"→"Clock"→"Time Setting" and check if the setting is "AUTO". In case the clock is not adjusted correctly, set the clock in "Manual" setting.



For more details, refer to the Owner's Manual.



Appendix C

The currently available FOTA software version is not the same version available to Retailers for USB updating use. However, the system which has been updated via the FOTA can be further updated using USB update. Updating the firmware using a USB flash drive by following the steps outlined in TSB 15-305-22R "Reprogramming File Availability for Optimization of Gen 4.5 Denso CP1.5 Infotainment Systems".

No	Category	Conditions/Symptoms to be improved		
1	SXM	The voice search feature in SXM has difficulty recognizing spoken voices due to low microphone input volume during voice search.		
2	SXM	When performing the operation to delete SXM viewing history under a certain 'Driver Profile' state, it may result in the deletion of SXM viewing history recorded under a different 'Driver Profile'.		
3	SXM	When repeatedly switching radio preset channels using the steering wheel switch, the previous preset channel may play back, and the highlight on the radio preset button disappears. Alternatively, preset channel switching via the steering wheel switch might become temporarily unavailable after a certain period.		
4	Phone	When selecting not to transfer the phone's contacts during Bluetooth pairing, transfering manually the phonebook through screen operations can fail. Additionally, the 'Manage Devices' screen may become greyed out and unresponsive in certain instances.		
5	Phone	After initiating the transfer of the phone's contacts from the smartphone, the transfer-in-progress screen may remain open and not automatically close even after the transfer has been completed.		

List of	Conditions.	Symptoms	and improv	vements Addi	ressed By this	undate
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No	Category	Conditions/Symptoms to be improved
6	Reprogramming	When the engine is turned off at a specific moment just before the completion of the CCU software update via FOTA, the expected completion notification screen does not appear when the engine is turned on next time.
7	Phone	 When connected to CarPlay, phone calls cannot be answered or hung up using the steering wheel controls. (The maximum registration limit for Bluetooth-connected devices is 7, but CarPlay can control a maximum of 5 devices. Therefore, when receiving calls on the 6th or 7th phone, it was not possible to control the calls.)
8	SXM	Immediately after starting the engine and navigating to the SXM screen, various SXM functions are not working. Playback channel information is not displayed on the screen. Button operations are unresponsive. SXM audio is not playing.
9	Bluetooth	 When following the steps below, Bluetooth connection may not become active, and it may become impossible to switch Bluetooth-connected devices (turning on/off the connection). > Steps With the CarPlay usage confirmation screen displayed on the CCU, press the 'Yes' button. Almost simultaneously, on the iPhone's settings screen, turn off the CarPlay toggle switch.

No	Category	Conditions/Symptoms to be improved
<mark>10</mark>	Bluetooth	Even with the Bluetooth actually connected, it is treated as not connected to Bluetooth on the audio screen ('No Device Connected' is displayed, and Bluetooth audio is not playing.)
11	<mark>CarPlay</mark>	Symptom 1: Automatic connection of Wireless CarPlay fails. Symptom 2: The status bar icon at the top of the CID (Central Information Display) indicates a Bluetooth connection status, but the 'Manage Device' screen shows Bluetooth as disconnected, resulting in inconsistent information as depicted below.
12	SXM	When pressing the "All" tab on the TravelLink Sports screen, a blank tab screen is displayed. To navigate to the "LPGA" within the "Sport"/ "Golf" category, you need to press it twice.
13	Navi	When repeatedly entering text on the destination search screen, the screen may freeze, and the navigation app restarts itself.

No	Category	Conditions/Symptoms to be improved
14	Navi	While a detour route is suggested by NAVI system, if a faster detour is found before reaching the suggested alternate point, the route bar switches to the detour display mode a few miles before the actual detour point, causing an error. This detour display mode continues and the route bar becomes inoperative until passing the detour point.
15	Display	The call reduction screen appears in the Status Bar while connected to Android Auto. Originally, when Android Auto is activated during a hands-free call, the call reduction screen should disappear.
16	Navi	During long-distance route navigation, if you deviate from the planned route and a rerouting occurs, there is a sudden jump in your vehicle's position to New York (the default location) while the rerouting is in progress. After approximately 3 seconds, your position returns to its original location.

No	Category	Conditions/Symptoms to be improved
17	SXM	While listening to the radio (FM/AM) and attempting to select a sports team channel (SXM channel) from the presets, if the chosen team has a sched- uled game on that day but it hasn't started yet, a popup screen displaying the game schedule appears. However, after the popup screen appears, the system returns to the previously played channel, and the SXM audio does not play.
<mark>18</mark>	Voice recognition	After setting a route in the navigation system and activating voice recognition function, the route guidance is not canceled even "Cancel Route" or "Delete Destination" is uttered.
<mark>19</mark>	Reset	CID screen restart may occur about 6 minutes after engine start due to a radio tuner startup failure. (This symptom is indistinguishable from other CID screen restarts.)
20	CarPlay	While using wireless CarPlay, the CarPlay screen may suddenly disappear and return to the HOME screen. (CarPlay is ended by overreacting to the loss of Wi-Fi signal.)
<mark>21</mark>	AndroidAuto	When repeatedly unplugging and plugging the USB cable of an Android device during AndroidAuto, it may lead to the "Android Auto connected" display showing up even when Android Auto is not actually running. As a result, reconnect the USB cable may not start Android Auto as expected.
22	Reset	Performing the following steps may lead to the CID screen rebooting again a few seconds later: Procedure: Turn on the Valet Mode function. Long-press the Volume knob to forcefully trigger a reboot of the CID screen. When the reboot begins, and the CID screen goes dark, turn the IGN-OFF and immediately open and close the door. When the CID screen reappears, turn the ignition on.
<mark>23</mark>	Reset	The CID screen suddenly reboots due to audio functionality problem. (It is difficult to visually distinguish this reset from other types of resets.)

No	Category	Conditions/Symptoms to be improved
24	Navi	After passing through a detour point, the route bar does not return to the normal route bar from the detour route branch display on the map.
<mark>25</mark>	Navi	The color of the traffic information on the map (yellow) is incorrect. Change it to the same color as the traffic information in the route bar (orange).
<mark>26</mark>	Voice recognition	When you say "Call ****" using voice recognition, the meter display shows ""Please wait a moment,"" but the call cannot be made. (Note: Replace "****" with the actual phone number or contact name you are trying to call.)
<mark>27</mark>	Navi	When you turn ignition off/on while in route guidance settings and cancel route guidance, the map scale does not return to the scale before the route was set, but instead maintains the map scale during route guidance.
<mark>28</mark>	Reset	The OEM navigation (map) app suddenly restarts.
29	Navi	If you repeatedly press the 'Yes' button on the POI(Point Of Interest) popup, the next time a POI popup appears, the 'Add Waypoint' popup also appears simultaneously, causing them to overlap.
<mark>30</mark>	Bluetooth	You can't play Bluetooth audio or register and unregister Bluetooth- connected devices. This symptom may occur when there is at least one registered Bluetooth device, and you attempt to delete a registered device from the 'Manage Devices' screen.

No	Category	Conditions/Symptoms to be improved
<u>31</u>	<mark>AndroidAuto</mark>	Situation: Connect a registered Android device to USB with IGN ON and, after launching the CID screen, immediately disconnect the USB. Symptoms: Even though Android Auto is not connected, the ""Connecting" icon appears on the Manage Devices screen. Also, despite disconnecting the USB, wireless Android Auto does not connect.
32	AndroidAuto	When you toggle on Android Auto from the Manage Device screen in CID while the Android device is not connected via USB, there may be a failure to start Wireless Android Auto. Image: the start Wireless Android Auto Image: the start Wireless Android Auto
33	Navi	When the system language is set to English, the brand name of that facility is not displayed on the POI (Point of Interest) details screen. In other languages, brand names like 'Subaru' are displayed, and it should also be correctly displayed in English."

No	Category	Conditions/Symptoms to be improved
<mark>34</mark>	Voice recognition	Starting the CCU (Cockpit Control Unit) voice recognition while using the SXM Voice Search function results in an error and ends the voice recognition.
35	Navi	In the navigation screen, the bottom of the destination suggestion list's popup screen is cut off and not fully displayed.
36	Radio	When pressing a preset button for a registered radio channel, you can play the channel. But the button you pressed does not highlight, and you cannot operate through presets using the steering wheel controls.
37	AndroidAuto	Wireless Android Auto disconnects. (Change of specificaitons) Stand-by time setting for automatic disconnection in case of no response from the smartphone is changed from 3 seconds to 10 seconds.

No	Category	Conditions/Symptoms to be improved
38	Reprogramming	After the installation of software updates via OTA (Over-the-Air), the "Current Version" field in the popup screen that appears during the next IGN-ON may be blank or empty.
<mark>39</mark>	Navi	Performing the following steps may cause the map scale to change to the default scale instead of the one you've set: Display the map (with the set scale). Ignition off/on. Change the map display mode (North-Up
40	Navi	During map data updates, if you switch off the Wi-Fi function from the Settings screen, pressing the Map icon on the Home screen doesn't display the Map screen for a while.
<mark>41</mark>	<mark>CarPlay</mark>	After unplugging and reinserting the USB cable of the wired CarPlay, the CarPlay becomes unable to launch. This issue occurs only CarPlay with wired. (Performing the following steps to recover;Turning off the ignition, waiting for a few minutes until the CAN sleeps, and then turning the ignition on)

No	Category	Conditions/Symptoms to be improved
42	Reset	When multiple reminders for maintenance dates, birthdays, and anniversaries are set and nearing, a series of pop-up notifications appear on the CID screen after starting the engine. If you try to delete a reminder right before it switches to the next one, the CID screen may reboot.
<mark>43</mark>	Phone	While connecting an iPhone running iOS 16.4 to a vehicle, the SMS functionality cannot be used from the CID screen.
<mark>44</mark>	Reset	When turning ignition on/off repeatedly, the CID screen may restart after startup.
<mark>45</mark>	Reset	When the automatic map data update function is set to ON (as shown in the below screen,) the CID screen may restart after engine startup.
<mark>46</mark>	Navi	Even when pressing the Map icon, the map does not appear, and it remains stuck on the 'Loading Navigation' message. This issue occurs due to a corrupted file that stores settings and destination history.

No	Category	Conditions/Symptoms to be improved
<mark>47</mark>	SXM	After registering SXM channels in the presets, when pressing the preset button after a while, it receives the broadcast information and displays the channel logo on the preset button. However, when switching the audio source to AM radio afterward, the preset button returns from the channel logo to a temporary logo 'SiriusXM'.
48	Display	When starting the engine remotely with a registered Driver Profile, one of the following display issues occurs.: The VDC (Vehicle Dynamic Control) icon on the Home screen is not displayed and remains blank. The icon next to the VDC icon on the Home screen is not displayed and remains blank. The icon next to the VDC icon on the Home screen is not displayed and remains blank.
<mark>49</mark>	Audio	After starting the engine, there is no sound from the speakers, including audio and voice guidance, and it is not possible to switch the audio source.
<mark>50</mark>	Reset	After starting the engine, the CID screen (CCU) resets approximately 3 minutes later.

No	Category	Conditions/Symptoms to be improved
<u>51</u>	Black Screen	When shifting from R to any other gear immediately after starting the engine, the CID screen takes some time to return to the home screen, displaying only a background.
<mark>52</mark>	CarPlay	When using CarPlay, CarPlay may disconnect at the timing to end a Siri(*) or phone call. Also, CarPlay cannot be reconnected afterwards. (*) Siri is the digital assistant that is part of Apple Inc.'s OS operating systems.
<mark>53</mark>	CarPlay	The screen does not switch to the CarPlay screen even if the CarPlay icon on the Home screen is pressed. (This occurs when both the operation to switch to the CarPlay screen and the automatic screen switching by some function overlap at the same time.)
<mark>54</mark>	SXM	<text></text>
55	Audio	Situation: USB audio in folder playback mode. All stations on repeat. Ignition OFF and then Track up operation after ignition ON Symptom: The track switches to the first track in the next folder even though it is not the last track in the folder.

No	Category	Conditions/Symptoms to be improved
<mark>56</mark>	Audio/Voice recognition	Situation: Audio source is other than USB audio USB audio has never been used after the ignition is turned on. USB audio is activated by voice recognition command ""play artist xxx"" or "play album xxx". Symptom: The last song played by USB audio is played, not the song commanded by voice. (only if the same USB is used)
57	Audio	 The following procedure will result in a mismatch between the song being played and the song list displayed on the screen. 1. Display the song list on the USB audio screen. 2. Switch to another screen other than the song list. 3. The song playback proceeds and switches to another song list. 4. Return to the USB audio song list screen.
<mark>58</mark>	Valet mode	 When ValetMode is set up for the first time, completion of PIN code entry within 20 seconds will prevent the ValetMode function from being switched on and off via smartphone thereafter. (Set the Pin code again and it will be normalized.) ValetMode:When leaving your vehicle with a valet service, such as at a hotel or restaurant, you can set the valet mode, which disables the navigation, audio, and vehicle setting functions. The display cannot be operated, preventing the leakage of personal information. The valet mode is designed to help prevent personal information leaks.
<mark>59</mark>	Navi	Situation: Narrowing down the search range within a specific city in the navigation destination search. Move to the POI category screen. Touch the city name input area, then the keyword input area, in that order. Symptom: The text keyboard, which should not be displayed, appears on top of the list of POI categories. Image: the search range Change the search range Select "In town or city" Enter the city name and select Display POI category Image: the search range Select "In town or city" Enter the city name and select Display POI category Image: the search range Text keyboard is displayed Text keyboard is displayed

No	Category	Conditions/Symptoms to be improved
<u>60</u>	Navi	When a language other than English is set, the distance to the destination displayed in the navigation destination is abnormal. When the distance is greater than 1.0, the decimal point is rounded down. When the distance is less than 1.0, the value becomes 0.1.
<mark>61</mark>	Audio	Situation: USB Audio in folder playback mode with repeats turned off When the last song in a folder has finished playing and is stopped, change the playback mode from the Song tab of the Browser (other than folder playback, such as Album or Artist) and select a song. Symptom: The playback screen or song list does not refresh and becomes frozen."
<mark>62</mark>	Navi	Situation: Press the POI (destination) Shortcut on the home screen to display the list of destinations. Press "x" to clear the list. Start driving with the Map screen displayed. Symptom: "Keyboard is disable while the vehile is in motion" is displayed on the screen" POI (destination) Shortcut Press "x" for the start driving the start drive the start drive the start driving the start drive the start drite the start drite the start
<mark>63</mark>	Reset	After Turning ignition on, the CID screen may restart repeatedly in 2-3 minute cycles.

No	Category	Conditions/Symptoms to be improved
64	Navi	<text><text><text><text><text><text></text></text></text></text></text></text>
65	Navi	Situation: Switching the language used for the text input keyboard on the search screen of the navigation application. Changing the system language of CCU. Symptom: Map is not displayed when Map is pressed from the home screen.
<mark>66</mark>	Navi	During navigation route guidance, if a Wi-Fi-based map data update is performed, and immediately after its completion, a route recalculation (rerouting) takes place, the navigation map screen may freeze, and the navigation app (map app) will restart.

No	Category	Conditions/Symptoms to be improved
		When you set a navigation destination and drive, repeatedly triggering rerouting by deviating from the route, and then start a map update via Wi- Fi. If you wait for about 30 minutes on a screen other than the navigation screen (like the HOME screen) before transitioning back to the navigation screen, the following symptom occur:
		symptom 1: The map is not displayed. symptom 2: The download start button is not displayed on the map update screen.
67	Navi	Symptom 1 Symptom 2 Symptom 2 Sympto
68	Navi	When using voice recognition to search for a destination based on a Point of Interest (POI) category name (such as "gas station"), the search results may display facilities that have names partially matching the POI category name, in addition to the facilities within that specific category.
<mark>69</mark>	Navi	While parked or driving, touch the traffic information icon on the map or the traffic information icon on the route bar and display the traffic information details screen. If you start driving with this screen displayed, it will exit the traffic information details screen and transitions back to the map screen.
70	Voice guidance	While driving with a navigation route set, there are instances where the voice guidance may not correctly pronounce "mile." It mispronounces "mile" as "me."
<mark>71</mark>	Operation	While using Bluetooth audio, the operation and overall performance of the CID screen may become slow.
72	SXM	Regarding the notification information screen for SXM's sports team channel, certain text appears in English even when the language settings are set to French.

No	Category	Conditions/Symptoms to be improved
<mark>73</mark>	Navi	Situation: In the OEM navigation app, after narrowing down the location by city and specifying a point in ""Add Home,"" then registering it as your home, if you proceed to ""Add Work"" and input any text into the search box. Symptom: The navigation app reboots.
<mark>74</mark>	CarPlay	After turning the ignition off and on, wireless CarPlay does not automatically reconnect.
<mark>75</mark>	Audio	When starting music playing on the Bluetooth audio screen, song information is displayed, the seek bar progresses, but there is no sound coming from the speakers.
<mark>76</mark>	Touch Operation	Suddenly, the touch screen on the CID (Central Information Display) becomes unresponsive, even though the screen display remains normal.
77	Driver profile	Even when the same smartphone as the previous drive is connected, the CID screen may display the message, "Are you sure you want to activate this profile?" Are you sure you want to activate this profile?
<mark>78</mark>	<mark>Maintenance</mark> Display	In the maintenance schedule settings screen, despite setting a date, the configured date is not displayed and is replaced with hyphens.
<mark>79</mark>	Radio	While listening to the radio, the audio suddenly cuts out.
80	Black Screen	Right after starting up, the CID displays only background without icons and no further operation can be done.

No	Category	Conditions/Symptoms to be improved
<mark>81</mark>	CarPlay	When turning the ignition on, there is a failure to automatically reconnect to the previously connected wireless CarPlay.
<mark>82</mark>	Reset	Shortly after turning the ignition on, the CID screen reboots.
<mark>83</mark>	AndroidAuto	Update to address security vulnerabilities in Android Auto's communication.
<mark>84</mark>	<mark>CarPlay</mark>	Change CarPlay's behavior so that when apps within CarPlay are silent, it continues playing the audio source from the vehicle's CCU (Cockpit Control Unit), thus preventing the sudden appearance of silent periods, improving the user experience.
85	Navi	The requirement to press ""OK"" on the Your Safety screen during the initial navigation launch sometimes wasn't displayed. To address this issue. Before the change: If the navigation app was launched for the first time from any icon other than the Map icon on the Home screen (e.g., through a rest suggestion feature), the Your Safety screen would not appear, and navigation functionality could not be initiated. After the change: Even if the navigation app is launched for the first time from an icon other than the Map icon on the Home screen, the Your Safety screen will be displayed.

No	Category	Conditions/Symptoms to be improved
86	Reprogramming	To use FOTA (Firmware update Over The Air) for CCU software update via DCM (Data Communication Module), it is necessary to switch from the Wi-Fi communication settings for MapUpdate to the DCM communication settings. To notify the customer about this switching, the below message screen pops up a new CCU software becomes available from the server.
<mark>87</mark>	Log	When exporting CCU logs to a USB memory stick, the message "Export failed" is displayed and the export may fail.
<mark>88</mark>	CarPlay	Automatic reconnection of Wireless CarPlay may take approximately 7 minutes.
89	Navi	When searching for navigation POIs using voice recognition, the response is "Navigation is not ready" and POI search may not start.
<mark>90</mark>	Navi	When the vehicle is in the state of New Mexico, the navigation app freezes and restarts after setting the destination on the navigation system.
91	Navi	When the vehicle with the navigation route set deviates from the guided route and triggers an automatic recalculation, the navigation app freezes.

No	Category	Conditions/Symptoms to be improved
92	Navi	When using voice recognition during navigation to say 'Search for *** along oute,' the POI search results list may display the same result twice.Image: the point of the point
93	SXM	Situation: Initiating the SXM Search feature simultaneously with the activation of the CCU unit's voice recognition. Symptoms: The voice recognition function encounters an error and ends. Push "Search" button on the screen and "VR" button on the
<mark>94</mark>	Operation	Situation: Displaying CarPlay call status in the Information Bar at the top of the CID during a call. Another popup overlaps on the Information Bar. Symptoms: Screen performance slows down, and touch operations become less responsive.
<mark>95</mark>	Display	During CarPlay navigation, text in the Turn By Turn information displayed in the Information Bar at the top of the CID may overlap. For example, the display of 'Unnamed road' and '**** Street 200m ' may overlap.

No	Category	Conditions/Symptoms to be improved
96	SXM	<complex-block><complex-block><complex-block><complex-block></complex-block></complex-block></complex-block></complex-block>
<mark>97</mark>	Bluetooth	Bluetooth function is not available. Since CarPlay uses Bluetooth connection at startup, CarPlay is also not available.
<mark>98</mark>	CarPlay	If CarPlay is manually turned on from the ManageDevices screen immediately after engine starts while CarPlay is automatically connected, CarPlay cannot be activated.
<mark>99</mark>	CarPlay	Situation: Immediately after engine start. CarPlay is automatically connected. Manually turn on CarPlay from ManageDevices screen. Symptom: CarPlay cannot be started.
<mark>100</mark>	Display	When shifting from reverse range, the icons on the CID Home screen may not be displayed, and only background may be displayed for a few seconds. (The clock at the top and the air conditioner screen at the bottom are displayed.)
<mark>101</mark>	CarPlay	CarPlay may disconnect when switching between CarPlay and other screens during CarPlay connection.
102	Driver profile	Switching the Driver Profile user causes the user to be logged into SXM even though he/she was not logged into the SXM account as the user after the switch. DriverProfile B (SXM account not logged in) Switch to DriverProfile Driver D
<mark>103</mark>	Audio	When the engine is repeatedly turned on and off with the driver's door open, audio and voice will not sound from the speakers and the volume change operation may not work.

No	Category	Conditions/Symptoms to be improved		
104	Display	Situation: Media screen (radio, Bluetooth audio, etc.) is displayed. A hands-free call is started and the Starlink screen is activated at the same time the call ends. Symptom: After the call ends, the Media screen and the Starlink screen are overlapped and displayed. Media Screen Starlink split display Two screens overlap $\boxed{\begin{tabular}{lllllllllllllllllllllllllllllllllll$		
<mark>105</mark>	SXM	If the ignition-off/on operation is performed quickly immediately after ignition-on, the previously viewed channel in SXM may not start playing automatically. (It will play by switching the audio source).		
106	SXM	When the contract status is Demo, "Your Trial Expires in 0 Days" is displayed on the SXM Setting screen. The display will be removed when the contract status is Demo.		
107	SXM	Gametime (1st Period, etc.) is not displayed on the pop-up screen of SXM Sports channel when a game starts.		
<mark>108</mark>	Radio	FM,AM radio is not available after turning ignition on.		

No	Category	Conditions/Symptoms to be improved		
<mark>109</mark>	CarPlay/ Android Auto	Bluetooth, AndroidAuto, and CarPlay may become unavailable when CarPlay is connected to an iPhone via USB cable.		
110	Audio	When returning to the Playlist List screen by pressing "Back" after selecting a Playlist on page 4 or later in the Playlist List screen, the Playlist List is displayed blank. $ = \begin{bmatrix} \text{When returning to the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & \text{When returning to page 4 or later in the Playlist List screen} & When$		
111	 Radio/SXM Fradio/SXM Preset button highlight disappears (shifts) Situation: When the SXM satellite channel and IP channel are registed alternately in the radio preset registration, and the preset channel are registed alternately in the radio preset registration, and the preset channel are registed alternately in the radio preset registration, and the preset channel are registed alternately in the radio preset registration, and the preset channel are registed alternately in the radio preset registration, and the preset channel are registed alternately in the radio preset registration, and the preset channel are registed alternately in the radio preset disappears. (It shifts from the curselected preset.) Information on the radio screen becomes blank. SXM sound is interrupted. The channel does not change even if the preset button is pressed. 			
<mark>112</mark>	Situation:Information display (logo, etc.) for SXM (SiriusXM) channels is blank.Symptoms:Registering a channel with blank information in presets results in a probutton with a blank label, and the channel logo is not displayed.Additionally, pressing the preset button with the blank label does not playback of the channel.			

No	Category	Conditions/Symptoms to be improved			
113	SXM	After turning the engine on, "Loading" should appear on the channel information screen until SXM playback starts, but it does not appear and remains blank. After turning the engine on SXM playback does not sound. Style playback starts Style playback does not sound. Style playback starts Style playback starts Style playback starts Style playback starts Style playback starts Style playback starts			
<mark>114</mark>	Voice Recognition	Speech recognition may not recognize the words "Cruise Control Options" when uttered.			
<mark>115</mark>	Audio	After turning ignition ON, the audio sound does not sound.			
116	SXM	 SXM sound stops sounding after certain operations. Situation: Register FM station A, an SXM sports channel that is not in the middle of a game, and FM station B in the order in which they are listed in the radio presets. Use the steering wheel switch to switch from FM station A to FM station B, skipping the SXM sports channel that is not in the middle of a game. Just before the playback of FM station B starts, operate the steering switch seek to return to the previous channel. 			
117	Black Screen	After turning ignition ON, the "CAUTION" screen is displayed for 2 minutes. After the "CAUTION" screen is displayed, a reset may occur.			

No	Category	Conditions/Symptoms to be improved		
<mark>118</mark>	SXM	While watching SXM's Xtra channel, "Slow Network"> "Something Went Wrong" is displayed and no sound is heard. Play Xtra Som network is displayed Som switching Som switching Something Somet		
<mark>119</mark>	Radio	After pressing the radio icon from the HOME screen, the FM radio may not sound.		
<mark>120</mark>	CarPlay	CarPlay will not be activated. (This occurs due to CarPlay connection authentication failure caused by corruption of certificate data read from AppleIC.)		
121	Audio	Situation: The previous audio source was USB audio. Plug in the same USB as last time and audio playback starts automatically Symptom: The playback starts from the first song on the USB instead of resuming from the song that was played last time. (This is more likely to occur when the number of songs on the USB is 4000 or more.)		
122	Audio	Situation: After USB audio playback, edit the folder structure and song order of that USB memory stick using a computer or other device. Restart USB audio on the same USB. Symptom: The playback song and the displayed song title are mismatched. (Playback resumes from the same song, but the displayed song title is misplaced.)		
<mark>123</mark>	SXM	When the preset channel on the SXM is pressed, a different channel is selected instead of the registered channel.		
<mark>124</mark>	Phone	The volume of the phone voice on hands-free calls is set to zero.		

No	Category	Conditions/Symptoms to be improved		
125	Display	The date of an e-mail received message is displayed as 1/1/2000 instead of the correct date. This occurs on some models of phones with Android OS 13 or later.		
<mark>126</mark>	Black Screen	 During Bluetooth audio playback, the CID screen may turn to a black screen. When this symptom occurs, it will recover the following steps. 1) The engine is turned off 2) The door is closed. 3) The engine is turned on again after waiting for about 3~5 minutes. (This symptom is caused by a malfunction in the audio player and the CPU utilization reaches 100%.) 		
<mark>127</mark>	Reset	When an iPhone/iPod is connected via USB cable and connected as an iPod audio device instead of CarPlay, the CID screen may reset when song information is received. (This occurs when some of the song information data sent by the iPhone/iPod is missing.)		
<mark>128</mark>	CarPlay	When using CarPlay, it may disconnect and not reconnect even after unplugging and plugging in the USB cable. (This occurs when there are repeated failures in data transmission/reception with the iPhone and the number of unanswered signals from the iPhone exceeds 127.)		
<mark>129</mark>	<mark>CarPlay</mark>	When starting the engine with the iPhone connected via USB, CarPlay may not start even if the CarPlay icon on the home screen is pressed. (This can be resolved by reinserting the USB cable.)		
<mark>130</mark>	Radio	The list of radio presets is all blank.		
<mark>131</mark>	Voice recognition	When operating the navigation system via voice recognition, certain regional place names (states, cities, etc.) are not recognized.		

No	Category	Conditions/Symptoms to be improved			
<mark>132</mark>	Voice recognition	Voice recognition does not recognize the name of a specific SXM channel when it is uttered.			
<mark>133</mark>	CarPlay	When WirelessCarPlay is disconnected due to radio interference, we have incorporated improvements to avoid radio interference and make it easier to reconnect.			
<mark>134</mark>	Bluetooth	Update to address vulnerabilities in the Bluetooth encryption mechanism.			
<mark>135</mark>	Bluetooth If the Bluetooth connection fails due to the loss of the link key in the following message should be changed to be displayed. Bluetooth Before changing Connection unsucessful Please try again lager. After changing Connection unsucessful Please try deleting and then re-pairing your device				
<mark>136</mark>	136 AndroidAutoAdd a function to automatically try to reconnect when Blueto AndroidAuto is disconnected due to no communication resp Android device. (If there is no response from the Android device) reconnection, it will disconnect.)				

Appendix D

TROUBLESHOOTING:

No.	Applicability	Case Scenario (Trouble)	Causes	Check Points
2-1	Step 2 (Downloading)	"In order to use the software update feature, a SUBARU STARLINK subscription is needed. Please visit MySubaru online for more information." is shown.	SUBARU STARLINK subscription is not confirmed	Please verify SUBARU STARLINK subscription status
2-2		"The software download failed." popup is shown while downloading.	An exception error due to hardware malfunction	Downloading will resume automatically 24hours later. If same error message again, please perform diagnostic of CCU or update CCU software via USB.
3-1	Step 3 (Installation)	"The software installation failed. An error occurred during installation. Please contact your retailer." popup is shown while installing.	An exception error due to hardware malfunction	Installation will resume automatically 24hours later. If same error message again, please perform diagnostic of CCU or update CCU software via USB.
3-2		"The software installation failed. An error occurred during installation. Please contact your retailer." popup is shown while installing.	An exception error due to hardware malfunction	Installation will resume automatically 24hours later. If same error message again, please perform diagnostic of CCU or update CCU software via USB.
3-3		Selected <remind later="" me="">, but next time IG ON 3.a.i screen is not displayed. Software Update The software update is ready. Would you like to install it now? This process could take 20 minutes. This update can be dismissed twice. After the second reminder, the system will automatically update.</remind>	DCM has lost connection to SUBARU server. After downloading was completed, DCM needs to connect with SUBARU server, before installing	Assure DCM has strong reception and reliable connection with the server, then turn ignition OFF and ON to repeat the test.